

## ABSTRACT

It is an object to provide a manufacturing process for a printed wiring board in which a copper foil and resin as a substrate material of a copper clad laminate are irradiated with carbon dioxide gas laser light to drill in both of them simultaneously. In forming a through hole or a hole such as IVH, BVH or the like in the copper clad laminate using carbon dioxide gas laser light, one of a nickel layer of 0.08 to 2  $\mu\text{m}$  in thickness, a cobalt layer of 0.05 to 3  $\mu\text{m}$  in thickness and a zinc layer of 0.03 to 2  $\mu\text{m}$  in thickness is formed as an additional metal layer on a surface of the copper foil residing in an external layer of the copper clad laminate and thereafter, by performing laser drilling, the copper foil layer and the resin layer as a substrate material of the copper clad laminate are enabled to drill simultaneously.